REMARKS

The Applicants do not believe that examination of the foregoing amendment will result in the introduction of new matter into the present application for invention. Therefore, the Applicant, respectfully, requests that the foregoing amendment be entered in and that the claims to the present application, kindly, be reconsidered.

The Office Action dated January 14, 2005 has been received and considered by the Applicants. Claims 1-40 are pending in the present application for invention. Claims 1-19, 25 and 26 are withdrawn from consideration. Claims 20-24 and 27-40 stand rejected by the Office Action dated January 14, 2005.

The Office Action states that corrected drawings are required in response to the January 14, 2005 Office Action. A copy of the corrected drawings is submitted, herewith.

The Office Action suggests that specification headings by added. The Examiner refers to 37CFR 1.77(b). The Applicant, respectfully, points out that 37 CFR 1.77(b) provides a suggestion for specification headings; however, there is no requirement that the specification contain headings. It is only required that the information appear in the order stated by 37 CFR 1.77(b). Therefore, the Applicants respectfully decline to add the specification headings suggested by the Examiner.

The Office Action rejects Claims 20-24 and 27-40 under the provisions of 35 U.S.C. §103(a), as being obvious over U.S. Patent No. 5,596,369 issued to Chan (hereinafter referred to as Chan) is view of U.S. Patent No. 6,647,061 issued to Panusopone et al. (hereinafter referred to as Panusopone et al.). In making this assertion the Examiner states that

Regarding Claims 20 and 32, the Examiner states that <u>Chan</u> teaches the elements recited by the rejected claims except coupling the inverse quantizer to the variable length decoder, coupling the discrete coisine transform to the inverse quantizer, and coupling the variable length decoder and inverse quantizer to the controller. In making this assertion, the Examiner states that <u>Chan</u> teaches to operate in one of a plurality of modes each having a given complexity characteristic for an acceptable distortion level of an output of the decoder and where the controller selects one of the modes based upon the given complexity characteristics (col. 5, line 6 line 4 – col. 6, lined 6). The Applicants would like to, respectfully, point out that col. 5, line 6 line 4 – col. 6, lined 6 of <u>Chan</u> discusses reducing memory bandwidth by controlling the motion and transform pipelines to concurrently process M data and I data such that the length of

time required for processing each macroblock is variable and determined by the largest length of time required for the motion pipeline to process the M data and a length of time required for the transform pipeline to process the I data of the macroblock. The Applicants, respectfully, assert that the foregoing subject matter taught by col. 5, line 6 line 4 – col. 6, lined 6 of <u>Chan</u> is not at all equivalent, or suggestive, for operating in one of a plurality of modes each having a given complexity characteristic for an acceptable distortion level of an output of the decoder and where the controller selects one of the modes based upon the given complexity characteristics.

The Examiner's position is that <u>Panusopone et al.</u> teach connecting the VLD and the inverse quantizer to the controller; therefore it would have been obvious for a person of ordinary skill with the art to also connect the motion compensator as well as the IDCT to have more control, allow for more efficient compression and better image quality. The Applicants, respectfully point out that the Examiner is reading elements into <u>Panusopone et al.</u> that, simply put, are not there in an effort to arrive at the invention as defined by the rejected claims. There is no disclosure, or suggestion, within <u>Panusopone et al.</u> to connect the motion compensator as well as the IDCT to the controller. The Examiner is simply modifying the cited reference <u>Panusopone et al.</u> to arrive at the invention as defined by the rejected claims. In view of the foregoing, this rejection, is respectfully, traversed.

Regarding Claims 21 and 33, the Examiner states that <u>Chan</u> teaches elements recited by the rejected claims. Specifically, the Examiner states that <u>Chan</u> teaches that the controller selects one of the modes based upon the amount of computing resources for operating the inverse quantizer, the variable length decoder, the discrete cosine transform, the inverse quantizer, and the motion compensator wherein the mode is substantially equal to the amount of available resources at col. 8, line 49 – col. 9, line 55. The Applicants, respectfully, point out that the determination of bandwidth requirements at a picture level instead of at macroblock level as taught by <u>Chan</u> does not teach or suggest the selection of one of the modes based upon the amount of computing resources for operating the inverse quantizer, the variable length decoder, the discrete cosine transform, the inverse quantizer, and the motion compensator. The Applicants, further point out that the teaching of <u>Chan</u> for bandwidth allocation based upon demand wherein a less complex macroblock will be decoded faster than a more complex macroblock does not teach, or suggest, selection of one of a mode that substantially equal to the amount of computing resources available as defined by the rejected claims. Therefore, this

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rejection is respectfully, traversed.

Regarding Claims 22-24 and 34-36, the Examiner states that <u>Chan</u> teaches elements recited by the rejected claims. Specifically, the Examiner stats that <u>Chan</u> teaches at col. 5, line 64 – col. line 6 that at least one IDCT is selectively operated in response to the controller. The Applicants, respectfully, point out that there is no mention or teaching of any sort of any IDCT on col. 5, line 64 – col. line 6 of <u>Chan</u>. Therefore, this rejection is, respectfully, traversed. Claims 22 and 34 have been amended to correct grammatical errors that should not be viewed as a substantial reason related to patentability.

Regarding Claims 27-29 and 37-39, the Examiner states that <u>Chan</u> teaches elements recited by the rejected claims. Specifically the Examiner states that col. 7, lines 11-31 of <u>Chan</u> teaches at least one scaleable application that is responsive to said controller. The Applicants respectfully disagree that there is any teaching of a scalable operation at col. 7, lines 11-31 of <u>Chan</u>. The Examiner further asserts that col. 7, lines 11-31 of <u>Chan</u> teaches a scaleable application is operable in a plurality of modes, each of said modes having a different complexity characteristic. The Applicants respectfully disagree that there is any teaching of a scalable operation that is operable in a plurality of modes, each of said modes having a different complexity characteristic. at col. 7, lines 11-31 of <u>Chan</u>. The Examiner further asserts that col. 7, lines 11-31 of <u>Chan</u> teaches that the controller determines if available resources are not suitable for operation of the scaleable application and selects another of the modes for the scaleable application. The Applicants respectfully disagree that there is any teaching of the controller determines if available resource are not suitable for operation of the scaleable application and selects another of the modes for the scaleable application and selects another of the modes for the scaleable application and selects another of the modes for the scaleable application at col. 7, lines 11-31 of <u>Chan</u>. Therefore, this rejection is respectfully traversed.

Regarding Claims 30, 31 and 40, the Examiner states that <u>Chan</u> teaches comprising a memory accessible to the controller that includes data indicative of complexity-distortion characteristics of each of the modes for a plurality of amount of available system resources at col. 5, lines 15-19, and at Fig. 5. The Applicants, respectfully point out that col. 5, lines 15-19 of <u>Chan</u> discusses a microprocessor which executes an operating program stored in microcode on a ROM. Futhermiore Fig. 5 adds nothing more than a basic block diagram of a system with a microcontroller, ROM VLD, and IDCT. There is no disclosure, or suggestion, for a memory accessible to the controller that includes data indicative of complexity-distortion

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characteristics of each of the modes for a plurality of amount of available system resources within <u>Chan</u>. Therefore, this rejection, is respectfully, traversed.

Applicant is not aware of any additional patents, publications, or other information not previously submitted to the Patent and Trademark Office which would be required under 37 C.F.R. 1.99.

In view of the foregoing amendment and remarks, the Applicant believes that the present application is in condition for allowance, with such allowance being, respectfully, requested.

Respectfully submitted.

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